

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 54

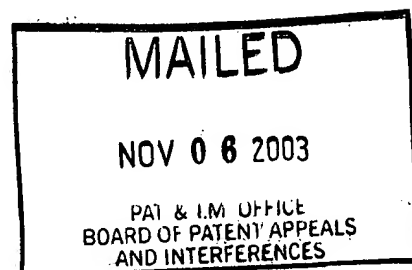
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RENE LANGHANS

Appeal No. 2001-2591
Application 08/883,685

HEARD: April 10, 2002



Before FRANKFORT, MCQUADE, and NASE, Administrative Patent Judges.

MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

On return from remand, this application is again before us for a decision on the appeal taken by Rene Langhans from the final rejection of claims 1 through 3, 5 through 8, 10 through 12 and 14 through 21. The appeal as to claims 7 and 21 has been dismissed (see Paper No. 48) in accordance with counsel's request at the oral hearing that these claims be withdrawn from the appeal.

On remand, the examiner (1) acknowledged receipt and entry of the reply brief filed May 24, 2001, Paper No. 48½ (see Paper

Appeal No. 2001-2591
Application 08/883,685

No. 49), (2) refused entry of the documentary evidence submitted with this reply brief and twice previously in Paper Nos. 40 and 42 (see Paper No. 49), (3) issued a supplemental answer, Paper No. 51, further explaining certain of the rejections on appeal, and (4) acknowledged receipt and entry of the reply brief, Paper No. 52, filed in response to the supplemental answer (see Paper No. 53).

THE INVENTION

The invention relates to "a circular cutting unit to cut flat lengths of materials, particularly sheet metals" (specification, page 1). Representative claim 1 reads as follows:

1. A circular cutter unit for cutting lengths of flat material comprising:

upper and lower circular blades lying in planes substantially perpendicular to a plane defined by the flat material and parallel with a longitudinal direction of the flat material;

upper and lower blade shafts respectively supporting said upper and lower circular blades, said shafts extending parallel with said plane of the material and perpendicular to said longitudinal direction;

a non-positive drive connection between said circular blades including a transport ring mounted for rotation with the blade on one of the blade shafts and in driving relationship with the blade on the other of the blade shafts;

a frame having substantially a U-shape when viewed in a direction perpendicular to the plane of the flat material with upper and lower legs interconnected by a flat yoke intersecting said plane of the flat material at an acute angle,

Appeal No. 2001-2591
Application 08/883,685

means for rotatably supporting said upper and lower blade shafts respectively in said upper and lower legs;

means for establishing and adjusting a cutting gap between said two circular blades; and

means for releasably coupling one of the circular blades of said cutter unit to a driving unit having a motor.

THE REJECTIONS

Claims 1 through 3, 5, 6, 8, 10 through 12 and 14 through 20 stand rejected under 35 U.S.C. § 112, first paragraph, as being based on a specification which is non-enabling.

Claims 1 through 3, 5, 6, 8, 10 through 12 and 14 through 20 stand rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter the appellant regards as the invention.

Claims 1 through 3, 5, 6, 8, 10 through 12 and 14 through 20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,116,098 to Suzuki et al. (Suzuki).

Attention is directed to the appellant's main brief and first and second reply briefs (Paper Nos. 36, 48½ and 52) and to the examiner's supplemental answer (Paper No. 51) for the

Appeal No. 2001-2591
Application 08/883,685

respective positions of the appellant and the examiner regarding the merits of these rejections.¹

DISCUSSION

I. Petitionable matters

On pages 4, 6 and 7 in the main brief, the appellant raises and argues as issues in this appeal the objections to the specification and drawings set forth in the final rejection (Paper No. 22). As these objections are not directly connected with the merits of issues involving a rejection of claims, they are reviewable by petition to the Director rather than by appeal to this Board (see In re Hengehold, 440 F.2d 1395, 1403-04, 169 USPQ 473, 479 (CCPA 1971)), and hence will not be further addressed in this decision.²

II. The 35 U.S.C. § 112, first paragraph, rejection

The examiner deems the appellant's specification to be non-enabling with respect to the claimed invention based on an allegedly confusing disclosure of displacement bush 13 in the

¹ The record indicates that the inclusion of canceled claim 13 in the statement of the 35 U.S.C. § 102(b) rejection in the supplemental answer (see page 7) was inadvertent.

² The record shows that the appellant has filed a petition (Paper No. 43) relating to the objections and that such was dismissed without prejudice pending the decision in this appeal (Paper No. 44).

drawing figures and in the specification at page 7, lines 11 through 21, and an unclear comparison between the inventive cutter and the state of the prior art in the specification at page 7, line 29, through page 8, line 14.

The dispositive issue with respect to the enablement requirement of § 112, ¶ 1, is whether the appellant's disclosure, considering the level of ordinary skill in the art as of the date of the application, would have enabled a person of such skill to make and use the claimed invention without undue experimentation. In re Strahilevitz, 668 F.2d 1229, 1232, 212 USPQ 561, 563-64 (CCPA 1982). In calling into question the enablement of the disclosure, the examiner has the initial burden of advancing acceptable reasoning inconsistent with enablement. Id.

The first point raised by the examiner relates to the recitation in independent claim 1, and the identical recitation in independent claim 18, of "means for establishing and adjusting a cutting gap between said two circular blades." The corresponding structure in the specification involves bush 13. The specification describes bush 13 as being longitudinally displaceable to allow a cutting gap between circular cutting blades 2 and 4 to be set and maintained (see page 5), with the longitudinal displacement being effected by rotating the bush

with a pin wrench 25 such that fine thread between the bush and a surrounding stationary nut 23 converts the rotation into a cutting gap adjustment motion (see page 7 and Figure 4). Of concern to the examiner is the failure of Figures 1 and 2 (and presumably Figure 3) to show a "slot" in frame upper leg 51 consistent with the "slot" depicted in Figure 4 which would allow the pin wrench 25 to access and rotate the bush. Arguably, the examiner's criticism of Figures 1 and 2 (and presumably Figure 3) as failing to show such a slot is well taken. The examiner has not cogently explained, however, and it is not apparent, why this self-evident discrepancy in the drawings would have prevented one of ordinary skill in the art from making and using, without undue experimentation, a cutting unit having a pin wrench slot consistent with the recitations in independent claims 1 and 18 of the "means for establishing and adjusting a cutting gap." Thus, as to the appellant's disclosure of bush 13, the examiner has failed to meet the burden of advancing acceptable reasoning inconsistent with enablement.

With regard to the second point raised by the examiner, the comparison between the inventive cutter and the state of the prior art on pages 7 and 8 in the appellant's specification, although not as detailed as the examiner might desire, is

reasonably clear on its face. What is not clear, and has not been cogently explained by the examiner, is how this comparison pertains to an enablement issue relative to the subject matter recited in the appealed claims.

Thus, the examiner's position that the appellant's specification is non-enabling with respect to the subject matter recited in the claims on appeal is not well taken. Therefore, we shall not sustain the standing 35 U.S.C. § 112, first paragraph, rejection of claims 1 through 3, 5, 6, 8, 10 through 12 and 14 through 20.

III. The 35 U.S.C. § 112, second paragraph, rejection

The examiner views the appealed claims to be indefinite for a number of reasons which will be treated in the order presented on pages 6 and 7 in the supplemental answer.

First, the examiner considers the recitations in independent claims 1 and 18 and dependent claim 3 of the "means for releasably coupling" the cutter unit(s) to a driving unit having a motor to be vague and indefinite because the appellant's specification fails to describe any particulars with respect thereto. The appellant's argument that one skilled in the art would nevertheless understand these limitations despite the lack of detail in the specification is not persuasive. The claim

language at issue is written in means-plus-function format which, under 35 U.S.C. § 112, sixth paragraph, must be construed as covering the corresponding structure described in the specification and equivalents thereof. If one employs means-plus-function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. In re Donaldson Co., 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994). If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112. Id. As the appellant's specification does not contain any meaningful disclosure relating to the "means for releasably coupling" recited in claims 1, 3 and 18, the scope of these limitations, construed as they are required to be under § 112, ¶ 6, is unclear.

Second, the examiner considers claim 6, which depends from claim 1, to be indefinite due to the inconsistency between the recitation in the claim preamble of a "cutter unit" and the recitation in the claim body of "at least one guide rail," which guide rail is described in the specification as being extraneous to the cutter unit. The appellant, implicitly agreeing with the

examiner's assessment of the specification in this regard, alternatively argues that claim 6 is directed to the combination of a cutter unit and a guide rail (see pages 11 and 12 in the main brief) or to a cutter unit comprising a guide rail (see pages 10 and 11 in the first reply brief). The former interpretation is inconsistent with the preamble of the claim, and the latter interpretation is inconsistent with the underlying specification. These inconsistencies render the scope of claim 6 unclear.

Third, the examiner considers claim 10, which depends from claim 1, to be indefinite because the meaning of the recited term "cutting angle" is unclear. As the cutting angle in question is adequately explained in the underlying specification (see page 8) and reasonably depicted in the drawings (see reference numeral 65 in Figures 5 and 6), the examiner's concern with claim 10, which is required to be read in light of the appellant's disclosure, is unfounded.

Fourth, the examiner considers claims 12 and 17, which depend indirectly from independent claim 1, to be indefinite due to a lack of clear antecedent basis for the term "said horizontal plane." Since this term as it appears in claims 12 and 17 does

Appeal No. 2001-2591
Application 08/883,685

indeed lack clear antecedent basis as asserted by the examiner, its meaning, and hence that of the claim, is unclear.

In light of the foregoing, we shall sustain the standing 35 U.S.C. § 112, second paragraph, rejection of independent claims 1 and 18 and dependent claims 2, 3, 5, 6, 8, 10 through 12 and 14 through 17, 19 and 20, but only for the reasons specified.

IV. The 35 U.S.C. § 102(b) rejection

As explained above, the scope of claims 1 through 3, 5, 6, 8, 10 through 12 and 14 through 20 is indefinite. For this reason alone, the standing 35 U.S.C. § 102(b) rejection of these claims must fall since it necessarily rests on speculative assumption as to the meaning of the claims. See In re Steele, 305 F.2d 859, 862-63, 134 USPQ 292, 295 (CCPA 1962).

The rejection also must fall because Suzuki fails to meet certain limitations of independent claims 1 and 18. Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

Suzuki discloses a gang shearing apparatus for slitting sheet material W into a plurality of strips S of predetermined

width. The apparatus 1 includes a plurality of tool carriages 15A and 15B, each comprising "a substantially C-shaped frame" (column 4, lines 49 and 50), a pair of upper and lower rotary shearing tools 17 and 19, rotatable shafts 131 and 163 supporting the upper and lower shearing tools 17 and 19, disk-like roll members 143 and 175 mounted on the rotatable shafts adjacent the shearing tool on the same shaft and in alignment with the shearing tool on the other shaft, spacers on the rotatable shafts for adjusting the horizontal clearance or gap between the upper and lower shearing tools, and bearing members 133, 135, 165, 167 supporting the rotatable shafts. The apparatus also includes upper and lower driving shafts 21 and 23 operatively connected via gears to the cutting tool shafts, a motor 229 which drives the upper driving shaft 21 through a chain and sprocket arrangement 231, 233, 235, and the lower driving shaft 23 through gears 237, 239, 243 and 249 disposed between the upper and lower driving shafts, and a pair of slide members 75 and 77 movably mounted on rails 79 and 81 so as to permit the distance between the tool carriages, and hence the widths of the strips S slit from the sheet W, to be adjusted.

As indicated above, claim 1 requires the circular cutter unit recited therein to comprise (1) "a non-positive drive

connection between said circular blades including a transport ring mounted for rotation with the blade on one of the blade shafts and in driving relationship with the blade on the other of the blade shafts," and (2) "a frame having substantially a U-shape when viewed in a direction perpendicular to the plane of the flat material with upper and lower legs interconnected by a flat yoke intersecting said plane of the flat material at an acute angle." Similarly, independent claim 18 requires (1) "a frictional drive connection between said blade shafts including a transport ring mounted respectively on each one of the upper and lower blade shafts . . . and disposed in frictional driving relationship with the circular blade on the other of the upper and lower blade shafts," and (2) "a frame having substantially a U-shape when viewed from above the horizontal plane with upper and lower legs interconnected by a flat yoke intersecting said horizontal plane at an acute angle."

The examiner considers the non-positive or frictional drive connection claim limitations to be met by the relationship between Suzuki's upper and lower shearing tools 17 and 19 and the disk-like roll members 143 and 175 respectively aligned therewith, and the U-shape frame claim limitations to be met by Suzuki's C-shaped tool carriage frames. Suzuki, however,

provides no factual support for the examiner's finding that the disk-like roll members 143 and 175 have frictional drive connections with the upper and lower shearing tools 17 and 19 aligned therewith. In fact, Suzuki's provision of upper and lower driving shafts 21 and 23 to positively drive the upper and lower shearing tools 17 and 19 belies this finding. Furthermore, Suzuki's Figure 3 shows that the frames have the described C-shape, which as a practical matter is a U-shape, when viewed from the side in a direction parallel to the plane of the flat material (sheet material W). The examiner's rationalization as to how this C-shape as viewed from the side in a direction parallel to the plane of the flat material also constitutes a U-shape when viewed in a direction perpendicular to the plane of the flat material or from above the horizontal plane rests on an unreasonable interpretation of both the claim language in question and the Suzuki disclosure.

For these reasons, we shall not sustain the standing 35 U.S.C. § 102(b) rejection of claims 1 through 3, 5, 6, 8, 10 through 12 and 14 through 20 as being anticipated by Suzuki.

SUMMARY

The 35 U.S.C. § 112, second paragraph, rejection of claims 1 through 3, 5, 6, 8, 10 through 12 and 14 through 20 is sustained,

Appeal No. 2001-2591
Application 08/883,685

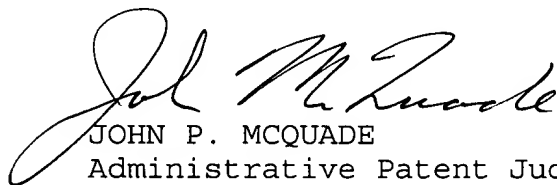
while the 35 U.S.C. § 112, first paragraph, and 35 U.S.C. § 102(b) rejections of these claims are not sustained. Since at least one rejection of claims 1 through 3, 5, 6, 8, 10 through 12 and 14 through 20 is sustained, the decision of the examiner to reject these claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

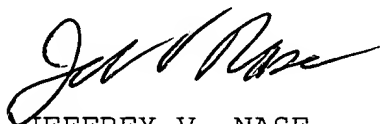
AFFIRMED



CHARLES E. FRANKFORT
Administrative Patent Judge



JOHN P. MCQUADE
Administrative Patent Judge



JEFFREY V. NASE
Administrative Patent Judge

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Appeal No. 2001-2591
Application 08/883,685

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